

REMARKS

Claims 1-21 were originally pending in United States Serial No. 09/674,369, filed on October 27, 2000. Claims 22-29 were added by Applicant's amendment filed on March 15, 2002. Claims 11, 13 and 29 have been amended, and new claims 30-42 have been added by Applicant's present response. Applicant respectfully requests reconsideration of claims 1-42, in view of the amendments and arguments presented herein.

At the time of filing the present application, Applicant paid for a total of twenty-one (21) claims, including three (3) independent claims. Amendment A, filed on March 15, 2002, added claims 22-29 to the present application, including three (3) independent claims. At the time of filing Amendment A, Applicant also submitted a check in the amount of \$198.00 to cover the cost of the additional claims. The present amendment has resulted in the addition of thirteen (13) new claims to the application. Also, claims 11, 13 and 29 have been amended from dependent to independent claims. Applicant has enclosed a check in the amount of \$243.00 to cover the cost of three (3) additional independent claims and thirteen (13) additional dependent claims. A Patent Application Fee Determination Record form is also enclosed herewith.

Allowable Subject Matter

Applicant acknowledges that claims 5, 14-18 and 20-28 have been allowed by the Examiner.

Claim Objections

The present Office Action indicates that claims 11, 13, 19 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 11 has been amended to include the limitations of base claim 7, and now reads as follows: "A liquefied soluble acidity reducing formulation consisting essentially of about 15% to about 20% by weight of an edible bicarbonate, a soluble binder, water and

optionally a preservative, wherein the formulation substantially excludes acidulent components, and wherein the weight of the edible bicarbonate is based on the weight of the edible bicarbonate, soluble binder and water. Applicant respectfully submits that amended claim 11 and new claims 30-33 are allowable.

Claim 13 has been amended to include the limitations of base claim 1, and now reads as follows: "A liquefied soluble acidity reducing formulation consisting essentially of an edible bicarbonate, a soluble binder, water and optionally a preservative, wherein the formulation includes from about 0.5 to about 1 part of propylene glycol and substantially excludes acidulent components." Applicant respectfully submits that amended claim 13 and new claims 38-42 are allowable.

Claim 29 has been amended to include the limitations of base claim 7, and now reads as follows: "[A] liquefied soluble acidity reducing formulation consisting essentially of an edible bicarbonate, a soluble binder, water and optionally a preservative, wherein the formulation includes from about 0.5 to about 1 part of propylene glycol and substantially excludes acidulent components." Applicant respectfully submits that amended claim 29 and new claims 34-37 are allowable.

Claim 19 is dependent on claim 17, which, in turn, is dependent on independent claim 14. Claim 14 (the "base claim") and claim 17 (the "intervening claim") have been allowed by the Examiner. Claim 19 merely further limits the scope of base claim 14 and intervening dependent claim 17 and, therefore, should also be allowed. Applicant, therefore, respectfully requests that the objection to claim 19 be withdrawn.

35 U.S.C. §102(b) Rejection

Claims 1-3, 6-9 and 12 have been rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent No. 4,744,986 to Luber et al. It is specifically alleged that Luber et al disclose an antacid composition containing a bicarbonate, a soluble binder, a preservative and no acidulents.

Applicant respectfully traverses this rejection. The Luber et al reference discloses a process for preparing a viscosity stable aqueous antacid composition. The process includes forming a mixture of an aqueous alginic acid salt and an antacid material, heating the mixture of aqueous alginic acid salt and the antacid material to an elevated temperature to form a stable reaction product and recovering the stabilized reaction product. The recovered antacid product floats on the surface of the stomach contents, thereby preventing gastric reflux of stomach acid from the stomach into the esophagus.

The antacid composition of Luber requires the inclusion of alginic acid salt in order for the antacid composition to perform its intended function. Luber et al discloses that the alginic acid salt component is used in an amount sufficient to form a rigid or semi-rigid gel matrix throughout a substantial portion of an acidic medium. See column 4, lines 27-32. The alginic acid salt forms a gelatinous foaming mass that floats on the surface of the gastric contents to form a physical barrier to gastric reflux. In contrast, the acidity reducing formulation of the present invention does not include alginic acid salt, which is disclosed as being essential to the Luber et al composition. Furthermore, there is no disclosure in Luber et al to provide an antacid composition that does not contain alginate acid salt to form a rigid or semi-rigid gel matrix. For this reason, Applicant submits that claims 1-3, 6-9 and 12 are patentable over Luber et al.

Additionally and separately, claims 7, 8, 9 and 12 include the transitional phrase "consisting essentially." The transitional phrase "consisting essentially" covers the recited limitations and any additional unrecited limitations that do not materially effect the basic and novel characteristics of the invention. The addition of an alginic acid salt to the claimed invention would cause the formulation to product a foamy, gelatinous mass in the acidic medium of the stomach. The addition of the alginic acid salt to the formulation claimed in claims 7-9 and 12, therefore, materially alters the basic and novel characteristics of the embodiments claimed in claims 7-9 and 12. Applicant, therefore, respectfully submits that claims 7, 8, 9 and 12 are patentable over Luber et al.

35 U.S.C. §103(a) Rejection

The Examiner has rejected claims 1-4 and 6 under 35 U.S.C. §103(a) as being unpatentable over United States Patent No. 5,350,591 to Canton for the same reasons set forth in the previous office action. In the previous action, it was specifically alleged that preparing a liquid product containing a bicarbonate, binder and water would have been obvious in view of Canton. With respect to claims 4 and 6, it was alleged that it would have been obvious to use sodium benzoate and potassium sorbate as preservatives in the liquid product.

Applicant respectfully disagrees with the rejection of claims 1-4 and 6 in view of Canton. As stated in Applicant's previous response, Canton discloses a dry, powdered foaming additive for hot coffee beverages. See Abstract; column 1, lines 6-10; column 3, lines 30-34; column 3, lines 55-65; column 4, lines 39-45; Example Nos. 1-3; claims 1-20. The objective of the Canton invention is to provide a dry powder coffee additive that produces a foam head having a skin on the top surface of hot coffee. The additive is intended to reproduce the foam head and skin of espresso. The foamed head is intended to closely resemble the color, taste, aroma and longevity of a steam generator prepared espresso coffee.

The dry, powdered *foaming additive* comprises a sugar, a starch, sodium bicarbonate, a two-component releasing agent and a hydrating agent. The Canton reference specifically teaches that the *foaming additive* "depends on sodium bicarbonate and releasing agents to release carbon dioxide gas into a sugar and starch combination under predetermined conditions." See column 4, lines 41-45. Canton specifically teaches that the two-component gas releasing agent is *critical* to the foaming additive composition. See column 5, lines 33-34. Only when the gas is released into, and becomes trapped in, the sugar and starch combination, does the foam head form on the surface of the hot coffee. See column 6, lines 15-17. Clearly, the sugar is necessary to trap the generated gas bubbles on the top surface of the coffee to form the foam head.

In contrast to the teachings of Canton, the present invention provides a liquefied soluble acidity-reducing formulation comprising an edible bicarbonate, a soluble binder, water, and optionally a preservative, wherein the formulation substantially excludes acidulent components. The liquefied acidity reducing formulation of the present invention does not contain a sugar

component (ie-a monosaccharide or disaccharide), which is expressly **required** by Canton. Furthermore, the present invention does not include a two-component releasing agent, which is disclosed as being absolutely **critical** to the dry powder **foaming** additive of Canton.

Canton also does not disclose or suggest a soluble binder for an edible bicarbonate. The starch component of the Canton reference is specifically included as a hydrating agent, and is included in the dry powder to control skin formation and the longevity of the foam head. See column 3, lines 38-40.

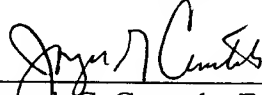
Example Nos. 1-3 contain 90 weight percent sugar, 88 weight percent sugar and 92 weight percent sugar, respectively. Clearly, the sugar component of the dry powder additive is the major component of the additive. The sugar is not included in the additive as a binder, but as an agent to trap released gas, thereby forming a foam head on the top surface of hot coffee.

It is well established that "if the proposed modification would render the prior art invention being unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification." *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). The present invention does not include either a sugar component or a two-part releasing agent. To modify the dry powder foaming additive of Canton to remove the sugar component or the two-part releasing agent would be to render the additive unsatisfactory for its intended use, as no foam head would form on the top surface of the hot coffee. Applicant, therefore, respectfully submits that there would be no motivation to modify Canton to provide an additive that does not contain a sugar component or a two-part releasing agent. For these reasons, Applicant respectfully submits that claims 1-4 and 6 are allowable over Canton.

In view of the amendments and remarks contained above, Applicant respectfully requests the withdrawal of the 35 U.S.C. §102(b) and §103(a) rejections, and further request the issuance of a Formal Notice of Allowance directed to claims 1-42.

Should the Examiner have any questions, Applicant's undersigned attorney would welcome a telephone call.

Respectfully submitted,



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MARKED-UP VERSION SHOWING CLAIM AMENDMENTS

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Claims 11, 13 and 29 have been amended as follows:

11. (amended) [The] A liquefied soluble acidity reducing formulation[, according to claim 7, wherein said formulation includes from] consisting essentially of about 15% to about 20% by weight [of said] of an edible bicarbonate, a soluble binder, water and optionally a preservative, wherein the formulation substantially excludes acidulent components, and wherein the weight of the edible bicarbonate is based on the weight of the edible bicarbonate, soluble binder and water.

13. (amended) [The] A liquefied soluble acidity reducing formulation[, according to claim 1,] comprising an edible bicarbonate, a soluble binder, water and optionally a preservative, wherein the formulation includes from about 0.5 to about 1 part of propylene glycol and substantially excludes acidulent components.

29. (amended) [The] A liquefied soluble acidity reducing formulation[, according to claim 7,] consisting essentially of an edible bicarbonate, a soluble binder, water and optionally a preservative, wherein the formulation includes from about 0.5 to about 1 part of propylene glycol and substantially excludes acidulent components.

New claims 30-42 have been added as follows:

30. (new) The liquefied soluble acidity reducing formulation, according to claim 11, wherein the edible bicarbonate is selected from the group consisting of sodium bicarbonate, calcium bicarbonate, potassium bicarbonate.

31. (new) The liquefied soluble acidity reducing formulation, according to claim 11, wherein the soluble binder is selected from the group consisting of cornstarch, wheat flower, arrowroot, xanthan gum, gum arabic, guar gum, agar agar, locust bean gum, gum tragacanth, cellulose gums and mixtures thereof.

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32. (new) The liquefied soluble acidity reducing formulation, according to claim 11, wherein the preservative is selected from the group consisting of sodium benzoate and potassium sorbate.

33. (new) The liquefied soluble acidity reducing formulation, according to claim 11, wherein said formulation includes less than about 1% by weight of said preservative, based on the weight of the bicarbonate and the soluble binder.

34. (new) The liquefied soluble acidity reducing formulation, according to claim 29, wherein the edible bicarbonate is selected from the group consisting of sodium bicarbonate, calcium bicarbonate, potassium bicarbonate.

35. (new) The liquefied soluble acidity reducing formulation, according to claim 29, wherein the soluble binder is selected from the group consisting of cornstarch, wheat flower, arrowroot, xanthan gum, gum arabic, guar gum, agar agar, locust bean gum, gum tragacanth, cellulose gums and mixtures thereof.

36. (new) The liquefied soluble acidity reducing formulation, according to claim 29, wherein the preservative is selected from the group consisting of sodium benzoate and potassium sorbate.

37. (new) The liquefied soluble acidity reducing formulation, according to claim 29, wherein said formulation includes less than about 1% by weight of said preservative, based on the weight of the bicarbonate and the soluble binder.

38. (new) The liquefied soluble acidity reducing formulation, according to claim 13, wherein the edible bicarbonate is selected from the group consisting of sodium bicarbonate, calcium bicarbonate and potassium bicarbonate.

39. (new) The liquefied soluble acidity reducing formulation, according to claim 13, wherein the soluble binder is selected from the group consisting of cornstarch, wheat flower, arrowroot, xanthan gum, gum arabic, guar gum, agar agar, locust bean gum, gum tragacanth, cellulose gums and mixtures thereof.

40. (new) The liquefied soluble acidity reducing formulation, according to claim 13, wherein the preservative is present and is selected from the group consisting of sodium benzoate and potassium sorbate.

41. (new) The liquefied soluble acidity reducing formulation, according to claim 13, wherein said formulation includes from about 15% to about 20% by weight of said edible bicarbonate, based on the weight of the edible bicarbonate, soluble binder and water.

42. (new) The liquefied soluble acidity reducing formulation, according to claim 13, wherein said formulation includes less than about 1% by weight of said preservative, based on the weight of the bicarbonate and the soluble binder.